

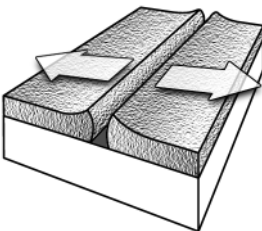
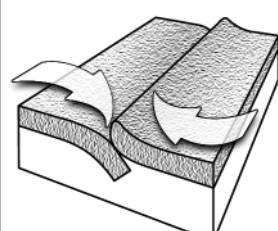
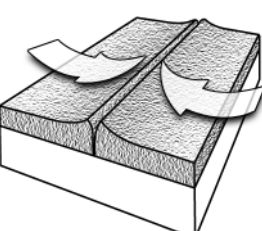
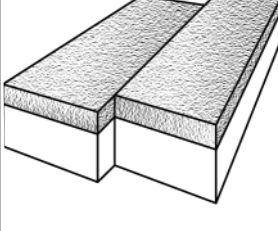
**Reinforcement****Theory of Plate Tectonics**

**Directions:** Use the following words to fill in the blanks below.

**asthenosphere****lithosphere****plate tectonics****convection****plates**

1. The theory of \_\_\_\_\_ states that Earth's crust and upper mantle are broken into sections.
2. These sections, called \_\_\_\_\_, are composed of the crust and a part of the upper mantle.
3. The crust and upper mantle together are called the \_\_\_\_\_.
4. Beneath this layer is the plasticlike \_\_\_\_\_.
5. Scientists suggest that differences in density cause hot, plasticlike rock to be forced upward toward the surface, cool, and sink. This cycle is called a \_\_\_\_\_ current.

**Directions:** Four diagrams are shown in the table below. Label and describe each diagram in the space provided in order to complete the table.

Diagram	Type of boundary and motion at boundary	Diagram	Type of boundary and motion at boundary
<b>6.</b> 		<b>8.</b> 	
<b>7.</b> 		<b>9.</b> 	

# What evidence supports seafloor spreading?

## Lesson Review

**PART A** Place check marks in the spaces provided to show where you would most likely find each place.

1. trench: \_\_\_\_\_ a. mountains \_\_\_\_\_ b. Pacific Ocean \_\_\_\_\_ c. Ring of Fire
2. subduction zone: \_\_\_\_\_ a. Ring of Fire \_\_\_\_\_ b. Pacific Ocean \_\_\_\_\_ c. mountains
3. mid-ocean ridge: \_\_\_\_\_ a. Atlantic Ocean \_\_\_\_\_ b. Iceland \_\_\_\_\_ c. Pacific Ocean

**PART B** Answer the questions below in complete sentences.

1. Explain the relationship between divergent boundaries and seafloor spreading. \_\_\_\_\_

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2. Explain how age evidence of rock is used as evidence to support seafloor spreading. \_\_\_\_\_

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## Skill Challenge

**Diagram A:** Draw arrows showing what happens at subduction zones.

**Diagram B:** Using the key, draw magnetic stripes and arrows to show changes in Earth's magnetic field as found in magnetic particles in rocks on the ocean floor. Then, draw arrows to show seafloor spreading.

